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University of Gondar and Addis Continental Institute of Public Health

Assessment of chronic non-communicable diseases patients' Satisfaction with pharmaceutical care in Public hospitals at Addis Ababa

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Acronyms

CVD	Cardio Vascular Disease
EC	Ethiopian Calendar
EPIINFO	Epidemiological Information
FMOH	Federal Ministry of Health
GC	Gregorian calendar
NGO	Non Governmental Organization
OTC	Over the Counter
SBGM	Self Blood Glucose Monitoring
SPSS	Statistical Package for Social Sciences

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Abstract

Problem statement

By applying pharmaceutical care, Pharmacists working in public hospitals have potential of preventing complications of diabetes and CVD. But this is not the case. Most pharmacy professionals are engaged merely in traditional dispensing of drugs and management of drug inventory. This traditional practice affects patient satisfaction and potential role of pharmacists in improving the patients' health.

Objectives: The main objective of this study was to assess the level of chronic non-communicable diseases patients' satisfaction with pharmaceutical care in public health facilities and examine possible factors which affect their satisfaction.

Methods: A cross-sectional survey with both quantitative and qualitative components was used to assess chronic non-communicable diseases patients' satisfaction with pharmaceutical care in four public hospitals, under the Addis Ababa City Administration Health Bureau from December 2010-February 2011.

Results: A total of 417 diabetic and CVD patients were participated in this study. 220(52.8%) of study participants were found to have satisfaction level below the mean satisfaction score. Sex, type of disease and frequency of visit had significant association with patient satisfaction. No statistically significant association was found for other socio-demographic characteristics like age, education level, occupation, marital status and type of payment.

Conclusion and recommendations: Findings of this study showed that more than half of (52.8%) of diabetic and CVD patients were not satisfied with the pharmaceutical service they received from the hospitals. Technical aspects of the pharmaceutical care practice received lower satisfaction rate by study participants as compared to the interpersonal skill. Emphasis should be given on the technical aspects of the pharmaceutical care.

1. Introduction

1.1. Background

Currently 80% of deaths from chronic disease occur in low- and middle-income countries, where people develop these diseases at younger ages, suffer longer, and die sooner(1). It is estimated that between 1990 and 2020, mortality due to heart disease in developing countries will increase by 120% in women and 137% in men(2). Between 2007 and 2025, the number of people living with diabetes globally will increase from 246 to 380 million, and the majority will live in developing countries (3, 4). In Ethiopia, nationally representative prevalence rate for CVD and diabetes is not available.

Pharmacists working in public hospitals have potential of preventing complications of diabetes and CVD by applying the new practice: Pharmaceutical care. Pharmaceutical care activities include counseling patients about their medications, monitoring patients' symptoms, helping resolve drug-related problems, facilitating communication with physicians, and performing condition- and patient-specific interventions when appropriate(5, 6).

Clients' evaluation of health care services is an important element in assessing accessibility of care and the quality of care delivered(7, 8). Patient satisfaction defined as "multiple evaluation of distinct aspects of health care which are determined in some ways by the individual’s expectations, attitudes and comparison process"(9). Patient satisfaction with delivery of health care services has become recognized as an increasingly important indicator of the quality of health services (10). It also reflects the provider's ability to successfully deliver care that meets patients' needs(11).

As compared to unsatisfied patients, satisfied patients are more likely to continue using health services, maintain relationships with specific providers, and comply with care regimens(12). Many factors affect patient satisfaction in pharmaceutical service including waiting time, health status, and the patient's own expectations (13-16).

1.2. Problem statement

Even if Pharmacists working in public hospitals have potential of preventing complications of diabetes and CVD by applying concepts of pharmaceutical care, this is not the case in our country. Most hospital pharmacy professionals are engaged merely in traditional dispensing of drugs and management of drug inventory. This traditional practice affects patient satisfaction and potential role of pharmacists in improving the patients' health.

Many studies have been conducted to assess patient satisfaction with medical services, but only few of them have specifically investigated pharmacy and even fewer have addressed different pharmacy settings (17-21). The same is true in Ethiopia.

In the past some researches were done to assess patient satisfaction in medical services. Little is known about the level and expectation of patients in Pharmaceutical care provided by public hospitals in Ethiopia and particularly in Addis Ababa. This study aimed at filling the void in information about patient satisfaction and expectation in Pharmaceutical care provided by public hospitals in Addis Ababa.

2. Literature Review

2.1. General Overview

Patients became a core concern in health care provision and quality assurance efforts in the last few decades(10, 22). Patients' evaluation of care has become an important method of assessing the quality of health care services (8). Data obtained from a patient satisfaction survey can be used for different purposes, such as identification of potential areas for health care services improvement (10); the comparison of the quality of different care programs and systems; the detection of patients likely to decline from health care plans(23). Therefore data on patient satisfaction can serve as an indicator of service quality and as a predictor of health-related behavior(9).

2.2. Chronic non-Communicable diseases and Pharmaceutical care

The global prevalence of all the leading chronic diseases is mounting, with the greatest burden occurring in low and middle income countries, and this is projected to increase significantly over the next two decades(24). By 2020, mortality from ischemic heart disease in developing countries is expected to increase by 120% for women and 137% for men(25). The global number of individuals with diabetes in 2000 was estimated to be 171 million (2.8% of the world's population), a figure estimated to increase in 2030 to 366 million (6.5%), 298 million of whom will live in developing countries(26). Communicable diseases have not simply displaced acute infectious diseases in developing countries. Rather, such countries now observed a polarized and extended double burden of disease(27).

There is now convincing evidence that strict control of type 2 diabetes is cost-effective and brings about improvements in overall quality of life (28, 29). Pharmacists and Pharmaceutical care can contribute to chronic diseases management program such as diabetes and CVD. Such programs may include a range of services: support of self blood

glucose monitoring (SBGM), monitoring and promoting patient adherence with medication and other components of self-management, identifying and resolving drug-related problems, providing targeted life style education, reminding patients of the importance of regular examinations for the presence of diabetic complications, for example, eye and feet examinations or drug therapy management and referrals to the patients general practitioner when needed for re-examination(30).

2.3. Patient satisfaction in health care service

Patient satisfaction is considered a personal evaluation or appraisal of a service or product received (31-33). Patient's pleasure with service reflects the realities of care as well as the preferences and expectations of the patient. Expectations and preferences may be viewed as the determinants of satisfaction, whereas the elements of care (e.g. technical and interpersonal aspects) are the components of satisfaction (22). Satisfaction can also be defined as an individual's judgment about the extent to which a product or service provides a pleasurable level of consumption-related fulfillment. Satisfaction results from evaluation of a product or service that nets some emotional reaction. A judgment is made by an individual as to how well the service was provided and this judgment results in pleasure if satisfaction occurs or displeasure if dissatisfaction occurs(34).

Patient's satisfaction with medical service can also serves as an important determinant of the feasibility and sustainability of health care services(35). High satisfaction from health care services promotes positive health behaviors, such as continuity with health care providers and compliance. Satisfied patients are more likely to take medications properly and less likely to change from one health care professional to another(36, 37).

Patient satisfaction measurements are increasingly being used to assess the competency of health care providers and the quality of care, particularly as satisfaction relates to continuity

of care (33, 38, 39). Satisfaction is also an important indicator of the quality of service delivered. It can be used for continuous monitoring and quality improvement in health care delivery systems(40). In addition, patient evaluations may help in identifying patient needs, perceptions, concerns and areas of service failure and may encourage health care providers to be accountable for the quality of service delivered(40).

Patient satisfaction is affected by structure, process, and outcome variables associated with health care services, as well as by patients' socio-demographic characteristics, physical and psychological status, and attitudes and expectations concerning various health care services they receive (41-43).

2.4. Measuring patient satisfaction in Pharmaceutical Care

Pharmaceutical care is a professional practice, the patient being the main beneficiary. This practice involves the responsible provision of pharmacotherapy to achieve definite outcomes related to the improvement of the patient's health and quality of life. Patient satisfaction has some important implication for the profession of pharmacy. From clinical perspective, because satisfied patients comply with medical regimen (including medications) participate in their own treatment and cooperate with their health-care providers. This will facilitate the provision of pharmaceutical care; their clinical outcomes will be better due to improved adherence(31).

Satisfaction may be conceptualized as a performance evaluation, disconfirmation of expectations, an effect-based assessment, or an equity-based assessment (44). Performance evaluation refers to personal evaluation of health care services and providers and is a good measure of patient satisfaction when patients have expectations of the service. Disconfirmation of expectations defines satisfaction resulting from the consumer comparing the service that was provided with the service and that was expected. Satisfaction as an

affect-based assessment has been defined as a pleasurable response to a service encounter. The conceptualization of satisfaction as an equity-based assessment is a comparison of patients' outcomes versus inputs with respect to someone else's outcomes and inputs(44).In applying these conceptualizations, two broad approaches have been taken to the measurement of satisfaction in the pharmacy literature. One approach has measured satisfaction from a service quality perspective which implies assessment of the provider's performance on different dimensions of a service (45-49). The other approach, known as affect-based measurement, seeks to measure satisfaction as a consumer's individual reaction to a particular service experience (50, 51).

A study conducted in community pharmacies in Tokyo and Osaka found that patient satisfaction was influenced by the attitude of the pharmacist/pharmacy personnel, availability of special services, appearance of facilities, and convenience of hours of operation (52). Another study conducted in community pharmacies in Malaysia in 2007 shows that customer satisfaction is affected by convenient hours, availability of OTC drugs and a variety of products, pricing and the attitude of the pharmacist (53). The same study revealed no significant differences in patient satisfaction observed based on customer gender, type of pharmacy visited, race and education level. However, significant differences were seen for age and employment status, with older persons and those unemployed showing higher degree of satisfaction. Another study conducted in community pharmacies in Nigeria also shows that pharmacist attitude, medication availability, convenience, pharmacy facilities and location were found to strongly affect patient satisfaction positively (54).

A study conducted Eastern Ethiopia shows association between patient satisfaction and availability of drugs within the facility. The same study found no significant differences in

satisfaction level based on age, educational status and consultation time. In this study the satisfaction level of clients with pharmaceutical service were found higher than other kinds of outpatient services (55).Another study that was conducted in Jimma hospital in 1999 found strong association between satisfaction and getting prescribed drugs from hospital pharmacy but no significant differences seen between satisfaction level, gender and payment scheme (56).

2.5. Patient expectation in Pharmaceutical care

A research conducted by Kucukarslan and Schommer found that patients' prior experiences, ideal referents, or market-based expectations affected patients' satisfaction with pharmacy services(57). A study conducted on HIV/AIDS patients in Addis Ababa revealed that majority of study participants wish to get pharmacy service in a shorter duration of time. Others would like to see politeness of staff, sufficient dispensing units, adequate supply of drugs, personal interaction with pharmacists and information on side effects of medicines (58). The study that was conducted in Malaysia shows patient expected health supplement, herbal consultation, weight control, body fat analysis, diabetes education, blood pressure/blood glucose/cholesterol monitoring, smoking cessation consultation and other free services from the pharmacy (53).

3. Objectives:

3.1. General Objective:

- To measure level of chronic non-communicable diseases patients' satisfaction in pharmaceutical care and assess possible factors that affect their satisfaction level with pharmaceutical care in public hospitals.

3.2. Specific Objectives:

- To determine chronic non-communicable diseases patients level of satisfaction in Pharmaceutical care
- To examine factors that affect chronic non-communicable diseases patients satisfaction in pharmaceutical care
- To identify chronic patients expectation in pharmaceutical care

4. Methods

4.1. Study setting

This study was conducted in Addis Ababa, the Federal Capital of Ethiopia and a Chartered City; having three layers of Government: City Government at the top, 10 Sub City Administrations in the Middle, and 99 Kebele Administrations at the bottom with area of 54,000 hectares and a population of more than 3 million(11). Its location is 9°1'48"N and 38°44'24"E (30). There are 5 hospitals and 25 government owned health centers under the Addis Ababa city Administration health bureau.

According to FMOH health and health related indicators for 2001 EC (2008/2009 GC) there were 15 public, 3 NGO, 135 private Pharmacies in the city. The same indicators shows that 193 pharmacist were engaged in pharmaceutical service. All hospitals have

special, inpatient and budget pharmacies that provide medicines and other pharmaceutical services.

4.2. Study Design

A cross sectional survey with qualitative and quantitative components was used to assess the level of patient satisfaction and expectation in pharmaceutical service in four public hospitals under Addis Ababa city administration, namely Zewditu Memorial, Yekatit 12, Menelik II and Ras Desta hospitals from December 2010-February 2011. In-depth interview with key informant was used as a qualitative method to complement the findings of the quantitative method and to assess patient's expectation in pharmaceutical care.

4.3. Target Population

Adult Cardio Vascular Diseases (CVD) and diabetic patients who received pharmaceutical service at least once in public hospitals were target population for this survey.

4.4. Study Population

Adult CVD and diabetic patients who received pharmaceutical service at time of data collection and met the inclusion criteria were used as study population.

Inclusion criteria: 18 years and older with cardiovascular and/or diabetic disorder, able to communicate with the interviewer and who received pharmaceutical service in the last six months in the study hospitals. CVD and diabetic patients were selected for this study as they were more prevalent than other chronic non-communicable diseases patients in the study hospitals.

Exclusion Criteria: CVD and diabetic patients who received pharmaceutical service in hospitals other than the study hospitals were excluded from the study.

4.5 Sample size calculation

4.5.1. Sample size calculation for quantitative part

A formula for cross-sectional survey was used to determine the sample size.

$$N = \frac{(Z\alpha/2)^2 P (1-P)}{d^2}$$

$Z\alpha/2 = 1.96$

$d = 0.05$

Sample size calculation was attempted using overall pharmacy service satisfaction rate of 56.04% from study conducted in Nigerian Teaching Hospital by Azuka C. Operah, Ehijie FG.O.Enato and Obehi A.Akoria (59). But the largest sample size was calculated using the satisfaction rate of female which was 48.84% from the same study. With 10% non-response rate the sample size was 423.

4.5.2. For qualitative part

Patients were purposely selected and enrolled for in-depth interview until new explanations were stop emerging from the interview. Total of five patients were interviewed during the study.

4.6. Sampling Procedure

Among the five public hospitals under Addis Ababa city administration, four hospitals which have referral clinics for chronic care are included in the study. The total sample size, 423 was allocated to each hospital proportionally based on the average monthly chronic non-communicable diseases patient number visiting each hospital. Therefore based on monthly chronic patients flow 125, 118,103 and 77 sample size was allocated to Zewditu, Menelik, Yekatit 12 and Ras Desta hospitals respectively. All adult CVD and diabetic patients who received pharmaceutical service at least once in the last six months, who were

presented at the chronic care clinics at the time of data collection and who were willing to participate in the study were selected for interview. Data were collected from December 2010-February 2011 from the study hospitals.

4.7. Data Collection Procedure

An updated instrument which was developed and validated by Larson LN, Rovers JP, Mackeigan LD were modified, adopted and used to assess patient satisfaction with pharmacy service in the hospitals (60). The questionnaire was translated in to Amharic. The Amharic version of the questionnaire was administered by face-to-face interview at the chronic care clinics in the study hospitals. The interview was conducted by seven Nurses who have prior experience of data collection. Semi-structure open ended questionnaire was used for in-depth interview with five patients. The principal investigator conducted the qualitative interview. All interviews were conducted in Amharic to facilitate the dialogue with participants. All usable interviews were included in the analysis.

4.8. Variables of the study

The dependent variable of this study is level of chronic patient satisfaction in Pharmaceutical care whereas the independent variables are the socio-demographic variables including age, sex, marital status, educational status, Occupation, type of payment, frequency of visit and type of chronic non-communicable disease.

4.9. Operational Definition

- Satisfaction scale- Refers to a questioner which consists of 18 items. All items are scored on a five point likert scale (1= poor, 2= fair, 3= good, 4= Very good and 5= excellent).
- Pharmacy professionals- refer to Pharmacists (health care professionals) worked in the hospital pharmacies under study.

- Chronic non-communicable diseases patients-refers to CVD and diabetic patients who received pharmaceutical care in the hospital under study.
- Fully satisfied- In this study patients who have at and above the mean score satisfaction are considered as satisfied patients.
- Not fully satisfied- refers to patients who have below the mean score satisfaction.

4.10. Data quality Management

- The questionnaire was prepared in English. It was translated in to Amharic and then back to English to maintain its consistency and facilitate the interview with study participants.
- Data collection tool was pre-tested. Based on the results of the pre-test questions were revised and edited to avoid confusion and misunderstanding.
- Data collectors and supervisors were trained by principal investigator on the objective of the study, process of data collection including approaching study participants, getting their consent and administer the interview prior to data collection.
- The principal investigator and supervisors were checking the data collection procedure frequently and collect completed questioner every time.
- Data cleaning and editing was conducted using EPI info 3.5.1.

4.10.1. Data Management

Supervisors were checking the data for completeness as the data is collected. The data was entered by principal investigator in to the template on EPI info 3.5.1 statistical software package for data cleaning purpose. The data was cleaned by principal investigator. Analysis of quantitative data was done using SPSS version 16 computer software. For qualitative part data were transcribed and translated into English and entered to computer; then it was exported to open code software for coding. Analysis was done manually.

4.11. Data Analysis

For the descriptive component summary measures like average (mean), proportions and frequency distribution was used. Binary logistic regression was used for comparison purpose and to examine the effect of selected variables on patients' satisfaction in pharmaceutical care. The qualitative data for in-depth interview was tape recorded, transcribed and analyzed using Open-Code version 3.4 computer software program (Umea University, Sweden).

4.12. Ethical Consideration

Ethical clearance was acquired from Ethical Review Board of University of Gondar (UOG), Addis continental Institute of Public Health (ACIPH) and Addis Ababa city Administration health bureau ethical review committee.

After securing written official approval from Addis Ababa city Administration Health Bureau ethical review committee, study hospital was approached individually. The purpose of the research was explained and permission was obtained from the respective health institution officials. Informed consent from individual participants was obtained by clearly explaining the purpose, the procedures and the right to decline from the interview. Name of the patient was not recorded and all information taken from the patient was kept confidential and used for the study purpose only. During data collection respect for individual participants was given due attention and participation was based on volunteerism. Ethical issues were included during orientation of data collectors.

5. Results

5.1. Socio-demographic characteristics of respondents

A total of 417 CVD and Diabetic patients from the selected hospitals were included in the study. Two hundred seven (49.5%) of the respondents were male. The mean age of the respondents was 48.5 (SD=15.5). The minimum age was 18 and the maximum was 83.Most of the participants of the study were married (64.9%). Regarding the educational level of the participants: 123 (29.5%) has secondary school level education and 79 (18.8%) of study participants were unable to read and write. Two hundred thirty one (55.5%) are employed in government, private, self or other non-governmental organizations, 107(25.5%) are retired, and 78 (18.8%) are unemployed. 243(58.7%) of the participants are diabetic patients and the others being CVD patients. Most of the study participants 313 (75.1%) are using the service free of charge while the others being covered cost of treatment out of pocket or by company. 185 (44.4%) received pharmaceutical service once in the last six months while 231(55.4%) of the study participant visited the pharmacy more than once. Table 1 below shows the socio-demographic characteristics of respondents.

Table 1-Socio-demographic characteristics of respondents of patient satisfaction survey with pharmaceutical care in hospitals of Addis Ababa, Ethiopia 2011

Variable	Number (n)	Percentage (%)
Sex		
Female	210	50.4
Male	207	49.6
Age		
18-25	31	7.4
26-35	70	16.8
36-45	93	22.3
46-55	74	17.7
>55	149	35.7
Mean age (SD)	48.47(15.56)	
Education		
Unable to write and read	79	18.9
Able to read or write only	12	2.9
1st - 6th grade	64	15.3
7th – 8th grade	43	10.3
9th-12 grade (high school)	23	29.5
Diploma	80	19.2
First degree & above	16	3.8
Marital status		
Single	90	21.6
Married	270	64.70
Divorced	21	5
Widowed	36	8.6
Occupation		
Government employee	72	17.3
Private company employee	98	23.5
Self employee	50	12
NGO	11	2.6
Student	19	4.6
Retired	107	25.7
Non-employed	59	14.2
Type of Chronic disease		
Cardio Vascular	174	41.7
Diabetes	243	58.3
Type of Payment		
By company	14	3.4
Free service	313	75.1
Cash/out of pocket	90	21.6
Frequency of visit		
One time	185	44.4
More than once	231	55.4

5.2. Chronic patients' satisfaction level in Pharmaceutical care

Based on the five point Likert scale the mean summary score of satisfaction was 47.96. By taking this summary score as a cut of point 197(47.2%) of patients were found to have satisfaction at or above the mean score and 220 (52.8%) of respondents had satisfaction level of below the mean score. The variables which had lesser values from the hypothetical midpoint of the likert scale (which is 3) and thus showed lesser level of patient satisfaction were: The availability of the pharmacist to answer your questions, the Pharmacist's interest in your health, the pharmacist's effort to work together with your doctor to make sure your medications are the best for you, the pharmacist's efforts to help you improve your health and stay healthy, availability of medicines that are prescribed to you in the pharmacy and overall pharmacy service. The courtesy and respect shown you by the pharmacy staff and the promptness of the prescription drug service received the highest mean score by respondents. Overall the mean values obtained for 12 items out of 18 are less than 3. Table 2 shows average satisfaction rate for each variable.

Table 2-Average satisfaction rate of CVD and diabetic in pharmaceutical care

Item	Mean	Std. Deviation
1.The pharmacist's professional relationship with you	3.14	0.941
2. The professionalism of the pharmacy staff	3.22	0.947
3. The availability of the pharmacist to answer your questions	2.30	0.843
4. The amount of time the pharmacist offers to spend with you	2.97	1.082
5.The Pharmacist's interest in your health	1.00	0.00
6. The pharmacist's ability to advise you about problems that you might have with your medications	2.89	1.182
7. How well the pharmacist explains what your medications do	2.88	1.182
8.How well the pharmacist instructs you about how to take your medications	3.22	1.059
9. How well the pharmacist explains possible side effects	2.78	1.211
10. How well the pharmacist answers your questions	2.98	1.087
11.The pharmacist's effort to work together with your doctor to make sure your medications are the best for you	2.48	1.183
12.The pharmacist's efforts to help you improve your health and stay healthy	2.62	1.166
13. The courtesy and respect shown you by the pharmacy staff	3.34	1.002
14. The privacy of your conversations with the pharmacist	3.00	1.160
15. The promptness of the prescription drug service	3.25	1.125
16. Availability of medicines that are prescribed to you in the pharmacy	2.54	1.251
17.Quality of medicines dispensed to you	2.80	1.161
18. Your pharmacy services overall	2.35	0.959

Responses ranged from poor(1) to excellent(5)

5.3 Factors affecting patient satisfaction (bi-variate analysis)

Bi-variate and multivariate analysis was done to identify possible socio-demographic and other explanatory variables that affect patient satisfaction in pharmaceutical care. The result of the bi-variate analysis shows statistically significant association between sex (P<0.021), type of chronic non-communicable diseases (P<0.04), frequency of visit (P<0.000) and level of satisfaction. Accordingly females are more satisfied than men [OR=1.5; 95% CI, 1.031-2.233].The analysis also shows more satisfaction level for diabetic patients as compared to CVD patients [OR=1.627; 95% CI, 1.097-2.412]. Patients who visited the pharmacy more than once were found more satisfied than those patients who came only once [OR=3.169; 95% CI, 2.112-4.755]. No statistical significant association was found for age, educational level, occupation, marital status and type of payment.

5.3 Factors affecting patient satisfaction (multivariate analysis)

Multivariate analysis also shows statistically significant association between sex, type of chronic non-communicable diseases, frequency of visit and level of satisfaction. With Females [AOR=1.556; 95% CI, 1.035-2.340], diabetic patients [AOR=1.818; 95% CI, 1.198-2.759], frequent visitors [AOR=3.309; 95% CI, 2.186-5.008] found more satisfied than men, CVD patients and those patients who visited the pharmacy once respectively.

Table 3-Comparison of socio-demographic and other variables with patient's satisfaction

Variable	Satisfied	Dissatisfied	COR(95% CI)	AOR (95% CI)
Sex				
Male	87(42)	120(58)	1.00	**1.00**
Female	110(52.4)	100(47.6)	1.517(1.031-2.2333)	**1.556(1.035-2.340)**
Age				
18-25	12(38.7)	19(61.3)	1.00	1.00
26-35	32(45.7)	38(54.3)	1.333(0.563-3.158)	4.245(1.156-15.582)
36-45	39(41.9)	54(58.1)	1.069(0.705-1.621)	1.563(0.644-3.792)
46-55	41(55.4)	33(44.6)	1.253(0.942-1.667)	1.511(0.567-4.027)
>55	73(49.0)	76(51)	1.111(0.911-1.353)	1.469(0.838-2.572)
Education				
Unable to write and read	40(50.6)	39(49.4)	1.00	1.00
Able to read or write only	69(50)	6(50)	0.975(0.289-3.284)	1.606(0.414-6.228)
1st- 6thgrade	32(50)	32(50)	0.975(0.504-1.885)	1.015(0.490-2.105)
7th – 8thgrade	24(55.8)	19(44.2)	1.232(0.584-2.597)	1.475(0.618-3.518)
9^{th}-12 grade (high school)	51(41.5)	72(58.5)	0.692(0.391-1.219)	0.855(0.408-1.792)
Diploma	37(46.2)	43(53.8)	0.839(0.450-1.564)	1.128(0.497-2.562)
First degree & above	7(43.8)	9(56.2)	0.758(0.257-2.237)	0.836(0.228-3.066)
Marital status				
Single	41(45.6)	49(54.4)	1.00	1.00
Married	131(48.5)	139(51.5)	1.126(0.698-1.818)	0.659(0.342-1.269)
Divorced	9(42.9)	12(57.1)	0.896(0.344-2.338)	0.357(0.113-1.130)
Widowed	16(44.4)	20(55.6)	0.956(0.439-2.080)	0.441(0.160-1.218)
Occupation				
Government employee	35(48.6)	37(51.4)	1	1
Private company employee	41(41.8)	57(58.2)	0.760(0.412-1.402)	0.716(0.358-1.432)
Self employee	24(48.0)	26(52)	0.976 (0.472-2.009)	0.900 (0.388-2.092)
NGO	4(36.4)	7(63.6)	0.604(0.163-2.244)	0.766(0.191-3.070)
Student	8(42.1)	11(57.9)	0.769(0.277-2.135)	0.619(0.181-2.119)
Retired	54(50.5)	53(49.5)	1.077(0.593-1.958)	0.991(0.452-2.174)
Non-employed	30(50.0)	30(50)	1.094(0.549-2.177)	0.849(0.367-1.966)
Type of Chronic disease				
Cardio Vascular	70(40.2)	104(59.8)	1.00	**1.00**
Diabetes	127(52.3)	116(47.7)	1.627(1.097-2.412)	**1.818(1.198-2.759)**
Type of Payment				
Free service	153(48.9)	160(51.1)	1.00	1.00
By company	5(35.7)	9(64.3)	0.581(0.190-1.77)	0.626 (0.167-2.352)
Cash/out of pocket	39(43.3)	51(56.7)	0.80(0.499-1.282)	0.788(0.447-1.388)
Frequency of visit				
One time	59(31.9)	126(68.1)	1.00	**1.00**
More than once	138(59.7)	93(40.3)	3.169(2.112-4.755)	**3.309(2.186-5.008)**

5.4. Assessment of patient expectation from pharmaceutical care (Results from in-depth interview)

Analyses of the qualitative interview revealed that majority of patients expect uninterrupted supply of medicine from hospital pharmacy. One diabetic patient said that:

"Most diabetic patients receive proper advice from physicians. Therefore we need availability of drugs in enough quantity. We are usually happy if the drugs are available and people suffer if the drugs are not available. Most patients can't afford buying the drugs as they are free patients. It is difficult to imagine buying drugs from private pharmacy. Hence drugs need special attention"

They have mentioned that additional training on diabetes and CVD should be given to pharmacy staff so that they will be knowledgeable about these diseases and will support patients in their treatment. The location of pharmacies in some hospital is not convenient for patients who are very sick and old. The location of the pharmacies is also the barrier for close collaboration between pharmacists and physicians in the hospital. A study participant said that:

"It is very difficult to rate the pharmaceutical care in the hospital as very good or excellent due to poor communication between pharmacists and physicians. In the pharmacy they said this is not correct and they return you back to the doctor. If there is communication means between them it will save their and patients' time".

This study participant would like to see the pharmacy and medical referral clinic in the same building or near to each other so that pharmacists and physicians will work together to improve the wellbeing of patients. Respect, detail and proper drug counseling service and better attention for diabetic and CVD patients are some of the services expected by study participants.

5.5. Reliability of Patient satisfaction instrument

The reliability of patient satisfaction instrument was assessed with Cronbach's alpha. The value of reliability coefficient for the 18 questionnaire was 0.934. With this coefficient the reliability of the instrument was found to be very good.

6. Discussion

Patient satisfaction with services rendered should be considered as an outcome measure of the care provided which helps improve the quality of the Pharmaceutical care delivered. The study examined satisfaction of CV and Diabetic diseases patients' satisfaction with pharmaceutical care at public hospitals in Addis Ababa.

The result of the assessment showed that the pharmaceutical service received lower level of satisfaction with more than half of the study participants (52.8%) were not satisfied with the service they received from public hospitals. This lower level of patient satisfaction in pharmaceutical service is consistent with the findings of similar study conducted by Azuka C. Oparah, Ehijie F. O. Enato and Obehi A Akoria from a teaching hospital in Nigeria (59). In contrast to this study pharmaceutical service received higher satisfaction rate as compared to other outpatient departments in a study conducted in Eastern Ethiopia (55). The possible explanation for this might be the multi-dimensional nature of the instrument used in this study. In their review of medical outcomes study, Rubin HR et.al found that patient satisfaction rating tends to be high (8). The lower level of satisfaction rate in this study might reflect the undeveloped pharmaceutical care practice at public hospital in Addis Ababa.

In our study participants tend to rate the interpersonal aspect of the pharmaceutical service higher as compared to the technical one. 12 out of 18 variables received rating lower than the

assumed mid-point of three. This result is consistent with the finding of the study in Nigerian teaching hospital (59).

When we assess the association between social-demographic factors and level of satisfaction, we found that none of the characteristics had statistically significant association with satisfaction except sex. The study conducted in Benin teaching hospital in Nigeria found no significant association between different socio-demographic variable and satisfaction. In our study older people tend to rate the service higher than younger clients though the difference is not statistically significant. Similar study conducted by Mohd Baidi Bahari and Yip Wai Ling on 1200 patients in community pharmacy in Malaysia found age as a significant influence upon satisfaction (53). In contrast to the above study we found no statistically significant association between employment status and satisfaction level. The Malaysian study shows unemployed customers reported higher evaluation score for the pharmaceutical care they received from the community pharmacy. Similarly, in our study retired and unemployed patients show high level of satisfaction as compared to employed one but the difference was not statistically significant.

Even if study participants with higher education level tend to be less satisfied than people with lower education level the association is not strong. This finding is similar with the findings of Mohd Baidi Bahari and Yip Wai Ling (53) and Birna Abdosh (55).

The study conducted in Eastern Ethiopia by Birna also shows that satisfaction level is associated with payment status with paying patients found less satisfied than non-paying patients with overall quality of service. However in our study the difference in the level of satisfaction between free and paying patients is not statistically significant.

The possible explanation for this might be disproportionate representation of both groups in this study with the majority of patients receiving the service free of charge. In line with above studies we found no statistically significant association between level of satisfaction and

marital status. Significant difference in level of satisfaction was observed between sex, frequency of visit and type of diseases. Females were found more satisfied than men in different aspects of the pharmaceutical care. CVD patients were found less satisfied than diabetic patients. This might be due to low understanding of CVD complication from pharmacy professionals and unavailability CVD medicines in public hospitals.

A Literature review conducted by Pradnya Naik Panvelkar, Bandan Saini and Carol Armour indicates that with higher frequency of counseling and monitoring patient's satisfaction in pharmaceutical care tend to be higher (61). In our study patients who visited the pharmaceutical service frequently are found more satisfied than those patients who received the service one time. This finding may indicate that those satisfied patient were visiting the service repeatedly.

When we look at the expectation of chronic non-communicable diseases patients in pharmaceutical care, we found that they have low expectation in the service. Majority of study participants were not paying for the service they are getting from the hospital. For this reason they need uninterrupted supply of medicine from hospital pharmacy. They said that getting medicines from private pharmacies in not affordable for the majority of chronic patients. Study participants were critical of little understanding of professionals working in the pharmacy about CVD and diabetes Mellitus. Because of that they wish all pharmacy professionals getting additional training on chronic non-communicable diseases and better support from pharmacy staff. Staff turnover at the hospitals, workload and lack of experience are mentioned as reasons for poor interaction and counseling service from pharmacy staff. Hence patients would like to see better staffed pharmacy service and with detail and proper counseling service in the future. One of the reasons that were mentioned by participants for their lower level of satisfaction in pharmaceutical service is poor communication between pharmacist and physicians. One of the contributing factors for this reduced communication is

the location of the pharmacies and medical referral clinics. Whenever there is medication error on the prescription paper, patients are asked to talk to their physician on the matter which they don't understand properly. Hence study participant would like to see pharmacies and medical referral clinics working in the same compound or near to each other. They believe that, in doing so, technical aspect of the pharmaceutical care will be improved and patients will be more satisfied with improvement in their health status.

The questioner which was designed to assess patient satisfaction in pharmaceutical care was found reliable as Cronbach's alpha is above 0.70. With further validation in different places, the Amharic questioners can be used as a reliable instrument to assess patient satisfaction in pharmaceutical care in public hospitals.

Strength and Limitations of the study

Strength

- All interviews for this study were conducted at medical referral clinics which minimizes social desirability bias.
- All hospitals under Addis Ababa City Administration Health Bureau which provides pharmaceutical service for diabetic and CVD patients were included in the study.
- Our response rate was 99.9% which might reduce non-response bias.

Limitation

- Lack of adequate national studies on the subject matter make comparisons of results difficult.
- Due to time and other resources constraint the minimum sample size was used for this study.

7. Conclusions

Findings of this study showed that more than half of (52.8%) of diabetic and CVD patients were not satisfied with the pharmaceutical service they received from the hospitals. Technical aspects of the pharmaceutical care practice received lower satisfaction rate by study participants as compared to the interpersonal skill. The result of this study also showed that socio-demographic characteristics like age, educational status, occupation, type of payment had no significant association with level of satisfaction. Sex, type of diseases and frequency of visit had significant association with patient satisfaction. In our study females, diabetic patients and frequent visitors of pharmacy service were found more satisfied than males, CVD patients and those who visited the service once respectively. Diabetic and CVD diseases patients in the study hospital expect adequate supply of drugs, politeness for pharmacy staff proper drug counseling service and good communication between Pharmacists and physicians.

8. Recommendation

Based on the findings of the study the investigators would like to recommend the following points which may help in improving patients' satisfaction in pharmaceutical care:

- Pharmacists should give emphasis on the technical aspects of the pharmaceutical care.
- Communication between Pharmacists and Physicians, Pharmacists and patients should be improved.
- Additional training on chronic non-communicable diseases should be given to staff working in the hospital pharmacies.
- Ensure availability and affordability of diabetic and CVD medicines in the hospital pharmacies.
- Further studies should be conducted to examine service related factors that affect patient satisfaction.

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Annexes

Annex 1- Verbal Consent form

Addis continental institute of public health and University of Gondar Joint MPH program

Questionnaire for Data Collection on Adult Patients' Satisfaction with pharmaceutical care in Public Hospitals under Addis Ababa City Administration Health Bureau, 2010

Identification

Name of Hospital_____

Date_____

Verbal consent form before conducting interview

Greeting:

Hello, my name is _____. I am working in the research team of ACIPH and UOG. I would like to interview you a few questions about your experience and opinion of pharmaceutical care in this hospital. The objective of this study is to Asses patient satisfaction and expectation in pharmaceutical care in this Hospital, which is important to improve the pharmaceutical Services. Your collaboration and participation for the interview is helpful in identifying problems related to the subject matter. Your name will not be written in this form. All information that you give will be kept strictly confidential. Your participation is voluntary and you are not obliged to answer any question you do not wish to answer. If you are not comfortable with the interview please feel free to drop it any time you want. Do I have your consent to continue?

If yes, continue to the next page

1 If no, ask the reason and skip to the next respondent.

Annex 2: Questioner to assess patient satisfaction in Pharmaceutical care (English version)

No	Items	Poor	Fair	Good	Very good	excellent
1	The pharmacist's professional relationship with you					
2	The professionalism of the pharmacy staff					
3	The availability of the pharmacist to answer your questions					
4	The amount of time the pharmacist offers to spend with you					
5	The Pharmacist's interest in your health					
6	The pharmacist's ability to advise you about problems that you might have with your medications					
7	How well the pharmacist explains what your medications do					
8	How well the pharmacist instructs you about how to take your medications					
9	How well the pharmacist explains possible side effects					
10	How well the pharmacist answers your questions					
11	The pharmacist's effort to work together with your doctor to make sure your medications are the best for you					
12	The pharmacist's efforts to help you improve your health and stay healthy					
13	The courtesy and respect shown you by the pharmacy staff					
14	The privacy of your conversations with the pharmacist					
15	The promptness of the prescription drug service					
16	Availability of medicines that are prescribed to you in the pharmacy					
17	Quality of medicines dispensed to you					
18	Your pharmacy services overall					

Annex 3- Data about study participant (Socio-demographic variables)

Back Ground information	**Variable**
1. Gender	☐ Male ☐ Female
2. Age (in years)	_____ Years
3. Level of education	☐ Unable to write and read ☐ 1st- 6th grade ☐ 7th– 8th grade ☐ 9th-12 grade (high school) ☐ Diploma ☐ First degree & above ☐ Other (Specify)
4. Marital status:	☐ Single ☐ Married ☐ Divorced ☐ Widowed
5. Occupation	☐ Government employee ☐ Private company employee ☐ Self employee ☐ Non-governmental Organization ☐ Student ☐ Retired ☐ Other (Specify)
6.Type of Chronic disease	☐ Cardio Vascular ☐ Diabetes
7.Frequency of visit in the last six months	☐ One time ☐ Two times ☐ Three times ☐ Four times ☐ Five ☐ More than five times
8. Type of Payment	☐ By company ☐ Free service ☐ Cash/out of pocket

Annex 4 Amharic consent form

የፊርማሲ አገልግሎቱ ተጠቃሚ የሆኑ የስኳር፡የልብና የልብ ነክ በሽታዊች ተጠቂ የሆኑ ግለሰቦች በጥናቱ ለመሳተፍ ፈቃኝነታቸዉን የሚገልፁበት ቅጽ፡

የሆስፒታሉ ስም----------

ቀን----------

ጤና ይስጥልኝ እኔ _____ እባላለሁ በአሁኑ ወቅት በአዲስ ኮንቲነታል ኢኒስቲቱት አፍ ፓብሊክ ሀልዝ እና በጎንደር ዩኒቨርሲቲ፣ አማካኝነት በሚደርገዉ እና የፋርማሲ ተጠቃሚ የሆኑ በሽተኖች በፋርማሲ አገልግሎቱ ዙሪያ ያላቸዉን አስተያየት በሚሠበስበዉ የጥናት ቡድን ዉስጥ አባል ነኝ፡፡

በመሰራት ሊይ ያለው ጥናት የጤና አግልግሎቱን የጥራት ደረጃ በተለይም ደግሞ የፊርማሲ አገልግሎቱን ደረጃ ለማሻሻል እና ተጠቃሚቆች የተሻለ አገልግሎት እንዲያገኙ የበኩሉን አስተዋጽኦ ያደርጋል፡፡

በመሆኑም ፈቃደኛ ከሆኑ በሆስፒታሉ የፊርማሲ ክፍል ስላገኙት አገልግሎት ያለዎትን አስተያየት በተመለከተ የተወሰኑ ጥያቄዎችን ልጠይቅዎት እወዳለሁ፡፡ ይህ መጠይቅ10 ደቂቃ ያልበለጠ ግዜ የሚወስድ ሲሆን በዚህ ጥናት ውስጥ የርስዎ ተሳትፎ ሙሉ በሙሉ በርስዎ ፈቃደኝነት ላይ የተመሰረተ ነዉ፤፡

ቃለመጠይቁን በማንኛውም ሰአት ማቋረጥ ወይም ጥያቄዎችን አለመመለስ የሚችሉ ሲሆን በዚህ ጥናት ውስጥ መሳተፍዎም ሆነ አለመሳተፍዎ በሆስፒታሉ ውስጥ በሚያገኙነት አገሌግልተ ላይ ምንም አይነት ተጽእኖ የማይኖረው መሆኑን ላረጋግጥሎዎት እወዳለሁ፡፡

በጥናቱ ውስጥ ለተነሱት ጥያቄዎች የሚሰጡት ምላሽ ሙሉ በሙሉ በምስጢር የሚጠበቁ ሲሆን የርስዎም ስም በማንኛዉም መልኩ በጥናቱ ውስጥ አይገለጽም፡፡

በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት?

ፈቃደኛ መሆናቸውን ካረጋገጡ ቃለመጠይቁን ይጀምሩ ፈቃደኛ ካልሆኑ ወደሚቀጥለው የአገልግሎቱ ተጠቃሚ ይሸጋገሩ፡፡

ቃለ-መጠይቁ የተደረገበት ቀን _____

Annex 5. Amharic questionner

የጥናቱ ተሳታፉዎች ከሆስፒታሌ ፊርማሲው ባገኙት አገሌግልት ሊይ ያሊቸውን አስተያየት የሚዲስሱ ጥያቄዎች 1= ጥሩ አይደለም (ጥአ) ፣ 2= ደህና ነው (ደነ)፣ 3= ጥሩ ነው (ጥ)፣ 4= በጣም ጥሩ ነው (በጥ) 5= እጅግ በጣም ጥሩ ነው (እበጥ)

ተ.ቁ	ጥያቄዎች	ጥአ	ደነ	ጥ	በጥ	እበጥ
1	የፋርማሲው ባለሙያ ከርስዎ ጋር ያለዉ ሙያዊ ግንኙነት					
2	በፊርማሲው ውስጥ የሚሰሩ ባለሙያዎች ሙያዊ ችሎታና ብቃት					
3	የፋርማሲዉ ባለሙያ የርስዎን ጥያቄ ለመመላስ ያሳየዉ ዝግጁነት					
4	የፊርማሲ ባለሙያው ከርስዎ ጋር በመነጋገር የሚያሳልፈው ጊዜ አግባብነት (በቂነት)					
5	የፊርማሲ ባለሙያው ስለርስዎ ጤንነት ለማወቅ ያለው ፍላጎት					
6	ከመዴሃኒቱ ጋር በተያያዘ ስለሚያጋጥመዎት ሁኔታ ከባለሙያው ያገኙት ምክር ሁኔታ					
7	ከመዱሃኒቱ ስለሚያገኙት ጥቅም ከባለሙያዉ የተሰጠዎት ገለጻ					
8	መድሃኒቱን እንዴት መዉሰድ እንዳለበዎት የፋርማሲ ባለሙያዉ የሚሰጥዎት ትእዛዝ እና ምክር					
9	ከመዴሃኒቱ ጋር በተያያዘ ስለሚከሰቱ ተጓዳኝ ችግሮች ከባለሙያው ያገኙት ምክር ሁኔታ					
10	የፊርማሲ ባለሙያው ለጥያቄዎችዎ የሰጠዎት መልሶች ተገቢነት					

ተ.ቁ	ጥያቄዎች	ጥአ	ደነ	ጥ	በጥ	እበጥ
11	ከፊርማሲው የሚያገኟቸው መዴሃኒቶች ለርስዎ ተስማሚ እንዲሆኑ የፊርማሲ ባለሙያው ከሃኪምዎ ጋር ለመነጋገር ያደረገዉ ጥረት					
12	ፊርማሲ ባለሙያው ጤናዎ እንዲጠበቅ እና ጤነኛ ሆነዉ እንዲቆዩ ያደረገዉ ጥረት					
13	በፊርማሲው ውስጥ የሚሰሩ ባለሙያዎች ለርስዎ ያሳዩት ትህትናና አክብሮት					
14	ከፊርማሲ ባለሙያው ጋር በምትነጋገሩበት ወቅት የነበረዎት ነፃነት(ባለሙያዉን ለብቻ ለማነጋገር የቻሉበት ሁኔታ)					
15	የመዴሃኒት ቤቱ አገልግሎት ቅልጥፍና					
16	የሚታዘዝሎት መዲሃኒት በሆስፒታሉ ፊርማሲ ውስጥ የመገኘት ሁኔታ					
17	ከፊርማሲው የሚያገኟቸው መዴሃኒቶች ጥራት					
18	በዚህ ሆስፒታል የሚያገኙት የፊርማሲ አገልግሎት ባጠቃላይ					

እርስዎን በተመለከተ አጠቃላይ መጠይቅ

1. ፆታ	☐ ወንድ ☐ ሴት
2. እድሜ	_____አመት
3. የትምህርት ደረጃ	☐ ማንበብና መፃፍ አይችሉም ☐ ከ 1ኛ-6ኛ ክፍል ☐ ከ7ኛ-8ኛ ክፍል ☐ ሁለተኛ ደረጃ/መሰናድ ትምህርት (ከ 9ኛ-12ኛ ክፍል) ☐ ዲፕሎማ ☐ የመጀመሪያ ዲግሪና ከዚያ በላይ ☐ ሌላ (ይገለፅ)_____
4. የጋብቻ ሁኔታ	☐ ያላገቡ ☐ ባለትዳር ☐አግበተዉ የፈቱ የትዲር ጓደኛን በሞት ያጡ
5.የስራ ቅጥር ሁኔታ	☐ የመንግስት ሰራተኛ ☐ የግል መሥሪያ ቤት ተቀጣሪ ☐ የራሱ ስራ ያለዉ/ያላት ☐ መንግታዊ ባልሆነ ድርጅት ዉስጥ ተቀጣሪ ☐ ተማሪ ☐ ጡረተኛ/ በጡረታ ከሥራ የተገለሉ ☐ ሌላ ካለ ይገለጽ
6.የህመሙ አይነት፡ -	የልብ….. የስኳር------
7. ባለፉት ስድስት ወራት የፋርማሲ አገልግሎት ለምን ያህል ግዜ አግኝተዋል	☐ አንድ ግዜ ☐ ሁለት ግዜ ☐ ሶስት ግዜ ☐ አራት ግዜ ☐ አምስት ግዜ ☐ ከአምስት ግዜያት በላይ

8. የክፍያ ሁኔታ	☐ በመስሪያ ቤት በኩል የሚከፈል ☐ በነፃ ታካሚ ☐ በጥሬ ገንዘብ

ቃለ-መጠይቁን ጨርሰናል፣ ስላደረጉልን ትብብር ከልብ እናመሰግናለን

Annex 7- English Guide for key informant interviews **with chronic patient on their satisfaction and expectation in pharmaceutical care**

Introduction: I would like thank you for your willingness to take your valuable time to meet with me today. My name is Abyu Faris and I am the principal investigator for the study entitled "Chronic patients' satisfaction in Pharmaceutical care in Public hospitals in Addis Ababa".

I would like to discuss with you about your satisfaction and expectation regarding the pharmaceutical service you have received in this hospital.

Purpose of Interview: Pharmaceutical care is considered to be one of the components of health care service. Measuring client satisfaction and recognizing their expectation is important to identify gaps in the pharmaceutical service. This also helps to improve quality of service and meeting clients' expectation.

We are interested to know your satisfaction and expectation about the pharmaceutical care in this hospital. The interview should take less than 30 minutes. The session will be taping so that any of your comments won't be missed.

All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, you don't have to talk about anything you don't want to and you may end the interview at any time.

Are you willing to participate in this interview? Yes No Interview Begins

Theme list for in-depth interview with director of pharmacy

1. How do express the Pharmacy staffs in this hospital?

- Are they available all the time?
- Are they polite and respectful?
- Are they willing to hear your problems?
- How do express your relationship with them?
- Promptness of service provided by pharmacy staffs?

2. How do you describe pharmacists' ability in providing the service?

- Do they advise you very well (e.g. how to take your medication, possible side effects, etc)? Can you give an example?
- Do they help you to improve your status? Can you tell me kind of support you get form pharmacy staffs? Was that helpful and enough?

3. What is your feeling about the drugs dispensed to you from the pharmacy?

- Availability of prescribed medicine all the time in the pharmacy?
- What is your feeling about the quality and expiry date of drugs dispensed to you?
- Do you remember the time when you receive poor quality medicine
- What was the problem and expiry date?

4. Which factors determine/affect your satisfaction in Pharmaceutical care?

5. What is your opinion about the pharmaceutical service overall?

6. What kind of service or improvement do you expect from the pharmaceutical service and staffs?

- Can you elaborate your point?
- Can you tell me more about that?

Thank you for your time and cooperation

Annex 8- Amharic version of guide for key informant interviews with chronic patients on their satisfaction and expectation in pharmaceutical care

መግቢያ፡ በቅድሚያ ከ ርስዎ ጋር ለመነጋገር ድል ስላገኘሁ ላመስግነዎት ወዳለሁ።።

ስሜ አብዩ ፋሪስ እባላለሁ።። በአዲስ አበባ ከተማ በሚገኙ የተመረጡ የመንግስት ሆስፒታሎች ውስጥ በሚሰጠው የፊርማሲ አገልግሎት ዙሪያ የተጠቃሚዎችን እርካታ እና ፍላጎትን በተመለከተ የሚደረገዉ ጥናት ዋና ተመራማሪ ነኝ።። ሥለሆነም እርስዎ በሆስፒታሉ ፊርማሲ በተሰጠዎ አገልግሎት ዙሪያ የእርሶዎን አስተያየት ማወቅ እሻለሁ።።

የቃለ-መጠይቁ ዋና አላማ፡- የተጠቃሚዎች አስተያየት እና እርካታ በፊርማሲ አገልግሎቱ ዙሪያ የሚታዩ ችግሮችን ለመገምገም እና የ አገልግሎቱን ጥራት ለማሻሻል ይረዳል።።በመሆኑም የእርስዎ አስተያየት እና ጥቆማ ለጥናታችን የሚረዳን በመሆኑ አስተያየቶን መስማት እንወዳለን።።ይህ ቃለመጠይቅ ከሰላሳ ደቂቃ ያነሰ ግዜ የሚወስድ ይሆናል።። በቃለመጠይቁ ዉስጥ የሚነሷቸዉን ነጥቦች ሙሉ በሙሉ ለመያዝ ይረዳ ዘንድ ሂደቱን በመቅረጸ-ድምጽ ለመቅዳት እወዳለሁ።።

ከእርሶ የምናገኛቻዉ መረጃዎች በሙሉ በምስጢር የሚጠበቁ ይሆናሉ።። ይህም ማለት የሚሰጡንን መረጃ ከጥናት ቡድኑ አባላት ውጭ ለማንም የማናሳይ ሲሆን የሚዘጋጁት ዘገባዎችም እርስዎን ማንነት የማይጠቅሱ ይሆናሉ።:

እርስዎ ለመናገር የማይፈልጉት ነገር ካለ ለመናገር እንደማይገደዱ እና ቃለመጠይቁን በማንኛውም ጊዜ ማቋረጥ እንሚችሉ ላስታዉስዎት እወዳለሁሁ።። በቃለ-መጠይቁ ለመሳተፍ ፈቃደኛ ነዎት?

አዎ ☐ አይደለሁም ☐ በቃለመጠይቁ ለመሳተፍ ፈቃደኛ ከሆኑ ቃለ-መጠይቁ ይጀምራሌ

1. በዚህ ሆስፒታል ዉስጥ የሚሰሩት የፋርማሲ ባለሙያዎች እንዴት ይገልጻቸዋል?
- በሚፈልጓቸዉ ግዜ ሁሉ ይገኛሉ?
- ለተገልጋይ ያላቸዉ አክብሮት?
- የርስዎን ችግር ለመስማት ያላቸዉ ፈቃደኝነት?
- ከባለሙያዎቹ ጋር ያለዎትን ግንኙነት እንዴት ይገልጹታል?
- ከፋርማሲ ባሉያዎቹ የሚያገኙት አገልግሎት ቅልጥፍና?

2. አገልግሎት የሚሰጡትን ባለሙያዎች ችሎታና ብቃት እንዴት ይገልጹታል?

- ተገቢውን ምክር ከባለሙያዎቹ ዘንድ ያገኛሉ? (ለምሳሌ መድሃኒቱን እንዴት መውሰድ እንዳለበዎት፡ ሊያጋጥሙ የሚችሉ የጎንዮሽ ጉዳቶች ወዘተ) ካገኙት ምክር ውስጥ ምሳሌ ሊሰጡኝ ይችላሉ)?
- ጤንነተዎ እንዲሻሻል ተገቢውን ድጋፍ ያገኛሉ?
- ያገኙት የድጋፍ ዓይነት ሊገልጹልኝ ይችላሉ? ድጋፉ ጠቃሚና በቂ ነበር?

3. ከሆስፒታሉ ፋርማሲ ስለሚያገኟቸውን መድሃኒቶች ያለዎት አስተያየት ምንድን ነዉ?

- መዱኒቶች በበቂ ሁኔታ ይገኛሉ?
- በመድሃኒቶቹ ጥራትና የመጠቀሚያ ግዜ ያለዎት አስተያየት?
- ጥራቱ የተጓደለ መድኃኒት የወሰዱበትን ግዜ ያስታዉሳሉ?
- ችግሩ ምን ነበች የመጠቀሚያዉ ግዜስ ምን ያህል ነበር?

4. በፋርማሲ አገልግሎቱ ዙሪያ የሚያረካዎት ነገር ምንድን ነዉ?

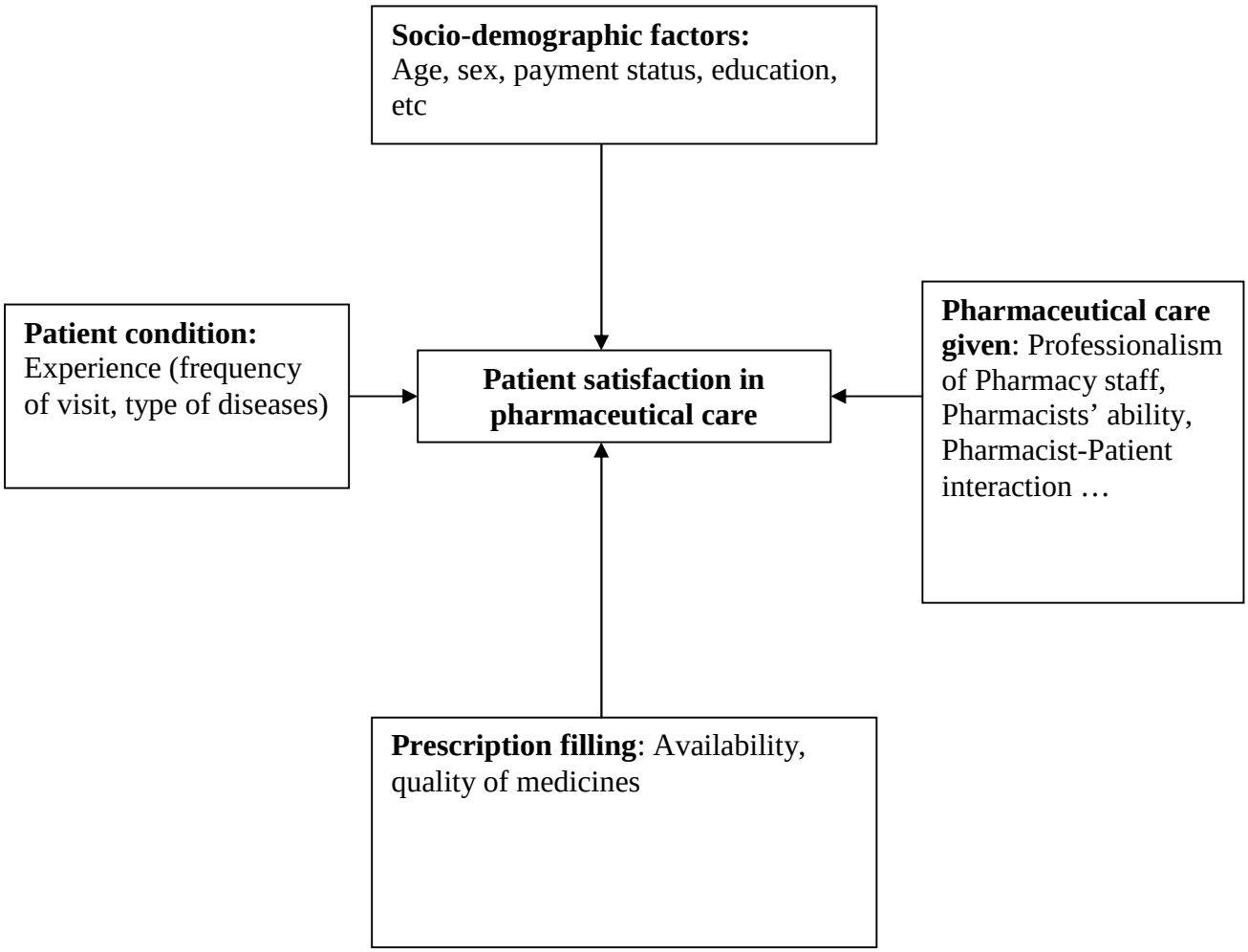
5. በአጠቃላይ በፋርማሲ አገልግሎቱ ዙሪያ ያለዎት አስተያየት? ያረኩበት እና ሊሻሻል የሚገባ ነገር ካለ?

4. ለወደፊቱ ከፋርማሲዉ እና ከባለሙያዎቹ ሊያገኙት የሚፈልጉትአገልግሎት ካለ?

- ያነሱትን ነጥብ ማብራራት ቢቹሉ?
- ተጨማሪ ነገር ባለሳነዉ ነጥብ ላይ ቢነግሩኝ?

ላደረጉልኝ ትብብር እጅግ አመሰግናለሁ

Annex 9- Conceptual frame work of patient satisfaction in pharmaceutical care



Declaration

I, the undersigned declare that this thesis is my original work in partial fulfillment of the requirement for the degree of Master of Public Health. I also declare that it has never been presented in this or any other university and that all resources and materials used in the thesis have been duly acknowledged.

Student Name: _____

Signature: _____

Place of submission: _____

Date of submission: _____

This thesis has been submitted for examination with my approval as university advisor

Advisor Name: _____

Signature: _____

Date of submission: _____